

27 Nov - SARL Digital Contest 30 Nov - SARL 80 m Club Contest, CW (Find the contest rules in the 2011 SARL Contest Manual)
26 and 27 Nov - CW WW DX CW Contest

I remember the first radio related experiment I did ... and yes it worked ... must have been like 4 or 5 years old.. two tin cans and a long bit of string ..! The hardest Math involved was tying the knots at each end! Wayne Soffe, M3JZT

#### Free SSTV Online Book

Martin Bruchanov, OK2MNM, has made his new book *Image Communication on Short Waves* available free on the web. You can either read it online or download the chapters in PDF format. Image Communication on Short Waves can be found at http://www.sstv-handbook.com/You can join the MMSSTV Yahoo Group at http://groups.yahoo.com/group/MM-SSTV/

# Backlog Is Clearing

Logbook of The World (LoTW) is continuing to accept and process logs, including logs from this weekend's ARRL November Phone Sweepstakes Contest. Currently, the processing delay is at 30 hours, down from 45 hours last week. As of 23 November, there are approximately 857 000 QSOs in 3 335 logs still waiting to be processed. If you have already uploaded a log, please do not upload it again; by doing so, you will only add to the queue. Do not send entire logs that contain previously







uploaded QSOs; use the date range option when signing logs, selecting only those QSOs in a specific date range to upload to LoTW. By following these guidelines, you will help LoTW process the backlog at a faster pace. Thanks again for your patience.

# DroidPSK - interface for Android to FT-817

This is a small interface, which makes it possible to connect an Android cell phone or tablet to a FT-817. This circuit might work on other radios as well but I was only able to test it on a FT-817 and an IC-756 PRO II. The goal was to build an interface which does not need an external power supply. You will find complete details at www.wolphi.com/category/droidpsk

# 2011 CQ WW DX Phone Contest

John, K1AR, reports that at least 7 025 logs were received for the CQ WW 55B contest as the deadline passed - an increase of more than 1 000 - nearly 15% - over the previous all-time total! The combination of new amateur populations around the world, great high-band propagation, and the ease of submitting a Cabrillo-formatted log are resulting in big increases in scores and log submissions!

## Contest Corral

As we approach the end of 2011, a look back at Contest Corral for the year finds 418 contests listed - not including contests that run more than once a month, such as the NS Sprints. Of the 418, there were 310 HF-only contests and 37 contests that only used the VHF+ bands. Most contests (72%) included CW - not bad for a mode now more than 170 years old! 47% featured phone operation and keeping with the trend of participation, 37% now have a digital component of the competition.

#### Word to the Wise

Assuming - Do not do it! Even though your logging program thinks it knows an exchange, do not just blindly accept that data. Many stations may have a new QTH or the program could be wrong in guessing where the station is located. In the CQ WW, that can cost you QSO points at the least and a multiplier at worst. Listen to what the station sends and log it!

# Operating Tip

To avoid a big metabolic shutdown during the contest - eat lightly and often so your stomach does not commandeer all that blood oxygen, shutting down your contest computer (the brain).

# Myanmar, XZ

## November

5 - **RaDAR Contest** 5 to 7 - ARRL CW Sweepstakes Contest

6 - DARC 10-Metre Digital Contest

11 – Armistice Day

12 to 13 - WAE DX RTTY Contest

13 - Remembrance Sunday

13 – PEARS HF DX Contest

18 to 20 – Cherry Festival, Ficksburg

19 to 20 - **SARL National Field Day;** ARRL SSB Sweepstakes Contest

26 to 27 - CQ WW DX CW Contest

27 - SARL Digital Contest

30 - SARL 80 m Club Contest, CW

## December

2 to 4 - ARRL 160 metre contest 4 - ZS4 HF Contest

10 to 11 - ARRL 10 metre contest 18 - Stew Perry Top Band Challenge

31 - end of 2011 CQ DX Marathon

26 - DARC Christmas Contest





After one year of discrete discussions with senior officials within the Myanmar Ministry of Post and Telecommunications and the Ministry of Tourism, Simon, HSOZIB, has received an invitation to visit Myanmar and to make a PSK31 'micro' DXpedition for about 4 days from the historic city of Bagan. The initial operation is on 20 m only, running about 50 watts into a PAR wire antenna. Simon hopes that this will be the first of many micro DXpeditions to Myanmar. More details are not known.

## African DX

Eritrea DXpedition rumours. Erling, LA6VM, has informed OPDX of the following E35X information being passed around, "It has come to my attention that rumours are going that I am planning an expedition to Eritrea using the call sign E35X. These rumours have no basis in any real situation.

The E35X call sign was issued to the LA5X Ham Forum group, headed by me, and used in June 1994 just a week after their declared independence. This was the first amateur radio activity licensed by the Eritrean authorities.

A possible cause for the rumour may be that I am working on updating the QRZ.com profile for LA6VM, to include my recent A52VM activity, and to include all my previous expedition call signs. At the same time, I have updated the profile to include responsibility for our E35X expedition, as the former QSL Manager, Ruth, LA6ZH, and her husband Thor, passed away sometime ago.

As far as I am informed, the current political situation that Eritrea is in makes it unlikely that any permission for amateur radio activity will be granted in the near future. We can only hope that this situation will be eased; firstly for the benefit of the Eritrean people. In an eased situation, I would guess that permissions for operation amateur radio in Eritrea will be granted......" Oslo, 14 November 2011, Erling, LA6VM"

Uganda, 5X. Nick, G3RWF will be active again as 5X1NH from Uganda for three weeks starting on 23 November. Usually he operates CW and digital modes, with some SSB. This time he hopes to "make a dent in the low bands." QSL via home call and LoTW.

Zambia, 9J. S53A is active as 9J3A until 30 November. Activity is on the HF bands but he is here mostly for the CQ WW DX CW contest. QSL via S57S.

Central African Republic, TL. TL8ES is the call sign issued to Elvira, IV3FSG, who has been in M'Baiki, Central African Republic for some time now. She plans to operate SSB, RTTY and PSK in her spare time. QSL via IK3GES.

Republic of Congo, TN. TN9SN is the new call sign issued to Nicolas Sinieokoff, ex-TN5SN, by the new licensing authority in the Republic of Congo. He plans to have it renewed for 2012, as he will be there until July.

Tunisia, 3V. SWL Ashraf "Ash," 3V4-002 (KF5EYY), will be active as 3V8SS from the "Radio Club Station of Tunisian Scouts" in Sousse, during the CQ WW DX CW Contest (26 and 27 November) as a Single-Op/All-Band/Low-Power entry. QSL via LoTW or to LX1NO. Read about Ashraf on the following Web page at <a href="http://www.gsl.net/3v4-002">http://www.gsl.net/3v4-002</a>







Somalia, 60. Just a reminder that Darko, J28AA/E70A, will be active as 600DX from Somalia between 21 and 30 November. He usually operates on CW, SSB and RTTY, and on 80 - 10 metres. QSL via K2PF or E77E.

Sierra Leone, 9L. Remember to look for operators Karl, DK2WV, Jan, DJ8NK, Andy, DL5CW, Andreas, DL9USA and Heye, DJ9RR, to be active as 9L0W from Banana Island (AF-037) between 22 November and 4 December. Activity will be on 160 - 10 metres using CW, SSB, RTTY and PSK. Their operations will also include participation in the CQ WW DX CW Contest. QSL via DK2WV. For more details and update, visit <a href="http://www.mdxc.org/910w">http://www.mdxc.org/910w</a>

The Gambia, C5. By the time you read this, the Czech-Slovak team (with 12 operators) should once again be active as C50C between 20 and 28 November. Activity will be on the HF bands 160 - 10 meters (no 30, 17 and 12 m). Their main goal is to participate in the CQ WW DX CW Contests (26 and 27 November) under the call sign C5A. QSL via Brani, OM2FY. There are also some changes in the contest crew. New team members Jano, OM2IB, Vitek, OK5MM, and Zdenek, OK1DSZ, will replace OK1DIX, OK1DO and OK1RK who couldn't take part in the CW contest for various reasons. The complete details can be found at <a href="http://www.om0c.com">http://www.om0c.com</a>

Liberia, EL. Remember to look for the VooDoo Contest Group to be active from here beginning November 21st. This is their 23rd straight year, but this time it will from a location just South of Monrovia, the capital of Liberia. Their main goal is to be an entry in the CQ WW DX CW Contest (26 and 27 November) as a Multi-Multi category using the call sign EL2A. Outside of the contest, the following mentioned operators will use their own personal call signs: Ned, AA7A (EL2NS), Roger, G3SXW (EL2A), Fred, G4BWP (EL2WP), Mike, KC7V (EL2MF), Lee, KY7M (EL2LF) and Bud, N7CW (EL2CW). QSL via their home call sign. Logs will be uploaded to LoTW.

## African Islands

Chagos Islands, VQ9JC. Jim, ND9M, is back at Diego Garcia (AF-006), Chagos Islands and expects to be QRV at least until 1 March 2012. The local licensing office renewed his regular license (VQ9JC) for two years and issued another short-term special prefix call sign (VQ91JC) for him to use from 19 November through 4 December. This will include a SOAB Low Power entry in the CQ WW CW Contest.

His usual active hours are 12:00 - 16:30 UTC on most days. He operates from the club station, where the current situation is far from being optimal. "Visitors over the last few months disconnected a number of coax and other cables without labelling them first," he says, "so I'm doing a lot of cable tracing (and labelling!). Much of the cabling work that VQ9LA did over the years has been removed for no apparent reason.

The finals in both amps (Alpha 99 and AL80B) have failed, so I will be running barefoot for the foreseeable future. The Navy owns the amps, but the Navy has not provided any equipment repair support for several years, and I will have to buy the replacement finals out of pocket, but that will not happen for several months.

In addition, the log periodic (10 - 30 MHz) works well, but the rotator binds around 020 degrees when turning clockwise (from north towards east). There is an apparent issue with strain on the coax caused by turning the rotator and maybe even the connection at the top of the 30-metre tower; the SWR skyrockets when the rotator is turned beyond 020 degrees as it moves to the east.

For now, the antenna will be left facing northwest rather than risk causing permanent damage until I can get up there. This heading favours the path to Europe and the Americas, but







obviously hurts the paths to JA and VK/ZL to the east as well as Long Path to NA to the south, but it cannot be helped at this point.

The single remaining HF rig is an IC-760, which has a lot of years and miles on it, but its performance is still adequate. (There is an FT-920 that is barely good enough for QRP on a couple bands.) I brought an FT-857 from home, which I am using to work the LEO satellites. It will also serve as a back up for HF should the 760 come into hard times.

I will be putting up a 5-element 6 m beam. That antenna will not be on the tower, but should still be high enough to take advantage of the openings that have finally started appearing. I'll use the FT-857 for working 6 m as well as the satellites."

Southgate Amateur Radio Club member Steve White, G3ZVW/AF6SU, will once again be active as ZD8N from Ascension Island (IOTA AF-003, WLOTA 1491) between 21 November and 2 December 2011. He has been off the island for almost three years. Activity will be on 80 - 10 metre CW, SSB and the Digital modes. He is also expected to participate in the CQ WW DX CW Contest (26 and 27 November). QSL via his home call sign, by the bureau or direct.

# Special Event Stations

Members of the Radio Amateur Association of Greece (RAAG) will activate the special event call sign SX100A between 00:00 UTC Friday 2 December and 24:00 UTC Sunday 4 December. The activity is to celebrate the 100<sup>th</sup> anniversary of the historic battleship the "Georgios Averof" joined the "Hellenic Navy." The operation will take place from the radio room of the "Georgios Averof." QSL via the Bureau. For more information, see <a href="http://www.grz.com/db/SX100A">http://www.grz.com/db/SX100A</a>

## Contest Calendar

This week's contests compiled by Bruce Horn, WA7BNM. The period covered is 14 to 21 November 2011.

ARRL SSB Sweepstakes Contest

21:00 UTC 19 November to 03:00 UTC 21 No-

vember Mode: SSB

Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Op QRP, low, high or unlimited; Multi-Op; School Club - College, Technical or

Secondary

Max operating hours: 24 with at least 30 min-

ute off times

Max power: HP: >150 watts; LP: 150 watts;

QRP: 5 watts

Exchange: Serial no, Precedence (Q, A, B, U, M or S), your call sign, check and ARRL/RAC

section

Work stations: Once only QSO Points: 2 points per QSO

Multipliers: Each ARRL/RAC section and VE

NT once

Score Calculation: Total score = total QSO

points x total mults

Submit logs by: 03:00 UTC 6 December 2011

E-mail logs to: <u>SSPhone@arrl.org</u>

Mail logs to: November SS Phone, ARRL, 225

Main St., Newington, CT 06111, USA

Find rules at:

http://www.arrl.org/sweepstakes

NA Collegiate ARC SSB Championship

21:00 UTC 19 November to 03:00 UTC 21 No-

vember Mode: SSB

Bands: 160, 80, 40, 20, 15, 10 m Classes: School Club (College)

Max operating hours: 24 with at least 30 min-

ute off times

Max power: HP: >150 watts; LP: 150 watts;

QRP: 5 watts

Exchange: Serial no, Precedence (Q, A, B, U, M or S), your call sign, check and ARRL/RAC

section

Work stations: Once only





QSO Points: 2 points per QSO

Multipliers: Each ARRL/RAC section and VE

NT once

Score Calculation: Total score = total QSO

points x total mults

Submit logs by: 03:00 UTC 6 December 2011

E-mail logs to: <u>SSPhone@arrl.org</u>
E-mail log summary to: <u>wm5r@wm5r.org</u>

Mail logs to: November 55 Phone, ARRL, 225

Main St., Newington, CT 06111, USA

Find rules at:

http://www.collegiatechampionship.org/rules/

Run for the Bacon QRP Contest 02:00 - 04:00 UTC 21 November

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m Classes: Single Band; All Band

Max power: 5 watts

Exchange: RST, state, province or country

and member no or power Work stations: Once per band

QSO Points: 1 point per QSO with nonmember; 3 points per QSO with member on same continent; 5 points per QSO with mem-

ber on different continent

Multipliers: Each state, province or country once; Multiply mults by 2 if >50 members

worked

Score Calculation: Total score = total Q50

points x total mults

Submit logs by: 27 November 2011

E-mail logs to: (none)

Upload log at:

http://www.fpgrp.org/pigrun/autolog.php

Mail logs to: (none)

Find rules at: http://www.fpgrp.org/pigrun/

SKCC Sprint

00:00 - 02:00 UTC 23 November

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m

Classes: (none)

Exchange: RST, name, state, province or

country and SKCC no or power Work stations: Once per band QSO Points: 1 point per QSO

Bonus Points: 5 points per Centurion member QSO per band; 10 points per Tribune member

QSO per band; 25 points per QSO with SKCC

club call (K95KC) per band

Multipliers: Each state, province or country

once

Score Calculation: Total score = (total QSO

points x total mults) and bonus points

Submit logs by: 23:59 UTC 25 November 2011

E-mail log summary to: (none)

Post log summary at:

http://www.skccgroup.com/sprint/sks/sks-

submit.html

Mail logs to: (none)
Find rules at:

http://www.skccgroup.com/sprint/sks/

QRP Fox Hunt

02:00 - 03:30 UTC 23 November

Mode: CW

Bands: 80 m Only

Classes: Single Op - Fox or Hound

Max power: 5 watts

Exchange: RST and state, province or country

and name and power output QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: Total score = total QSO

points

Submit logs by: 03:30 UTC 24 November 2011

E-mail logs to: (see rules)
Mail logs to: (none)

Find rules at:

http://www.grpfoxhunt.org/winter\_rules.htm

CWops Mini-CWT Test

13:00 - 14:00 UTC and 19:00 - 20:00 UTC 23 November and 03:00 - 04:00 UTC 24 Novem-

ber

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m Classes: Single Op QRP, low or high

Max power: HP: >100 watts; LP: 100 watts;

QRP: 5 watts

Exchange: Member: Name and member no; non-Member: Name and state, province or

country

Work stations: Once per band QSO Points: 1 point per QSO Multipliers: Each call once





Score Calculation: Total score = total QSO

points x total mults

Submit logs by: 04:00 UTC 26 November 2011

Post log summary at:

http://www.hornucopia.com/3830score/

Mail logs to: (none) Find rules at:

http://www.cwops.org/onair.html

RSGB 80 m Club Sprint, CW 20:00 - 21:30 UTC 24 November

Mode: CW Bands: 80 m Only Classes: 100 W; 10 W

Exchange: other station's call, your call, serial

no and your name

QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: Total score = total QSO

points

Submit logs by: 1 December 2011

Upload log at:

http://www.rsqbcc.org/cgi-bin/hfenter.pl

Mail logs to: (none) Find rules at:

http://www.rsgbcc.org/hf/rules/2011/rsprint

.shtml

**QRP Fox Hunt** 

02:00 - 03:30 UTC 25 November

Mode: CW Bands: 40 m Only

Classes: Single Op - fox or hound

Max power: 5 watts

Exchange: RST, state, province or country,

name and power output

QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: Total score = total QSO

points

Submit logs by: 03:30 UTC 26 November 2011

E-mail logs to: (see rules) Mail logs to: (none)

Find rules at:

http://www.grpfoxhunt.org/winter\_rules.htm

NCCC Sprint

02:30 - 03:00 UTC 25 November

Mode: (see rules)

Bands: (see rules) Classes: (none)

Exchange: (see rules)

Score Calculation: Total score = total QSO

points x total mults

Submit logs by: 27 November 2011

E-mail logs to: (none)
Post log summary at:

http://www.hornucopia.com/3830score/

Mail logs to: (none)
Find rules at:

http://www.ncccsprint.com/rules.html

CQ Worldwide DX CW Contest

00:00 UTC 26 November to 24:00 UTC 27

November Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Op All Band QRP, low or high; Single Op Single Band QRP, low or high; Single Op Assisted All Band QRP, low or high; Single Op Assisted Single Band QRP, low or high; Xtreme Single Op; Multi-Single; Multi-

Two; Multi-Multi; Xtreme Multi-Op

Max power: HP: 1 500 watts; LP: 100 watts;

QRP: 5 watts

Exchange: RST and CQ Zone no Work stations: Once per band

QSO Points: 0 points per QSO with same country (counts as mult); 1 point per QSO with different country same continent; 2 points per QSO with different country same continent (NA); 3 points per QSO with dif-

ferent continent

Multipliers: Each CQ zone once per band;

Each country once per band

Score Calculation: Total score = total QSO

points x total mults

Submit logs by: 21 December 2011
E-mail logs to: <a href="mailto:cw@cqww.com">cw@cqww.com</a>
Web-to-Cabrillo form:

http://www.b4h.net/cabforms/cqwwcw\_cab.p

<u>hp</u>

Mail logs to: Paper Logs, Box 481, New Car-

lisle, OH 45344, USA

Find rules at:

http://www.cgww.com/rules.php

http://www.cqww.com/rules/CQWW-Rules-

Xtreme.pdf



SARL Digital Contest

13:00 - 16:00 UTC 27 November

Mode: PSK, RTTY Bands: 80, 40, 20 m Classes: (none)

Exchange: RST and QSO no

Work stations: Once per mode per band

QSO Points: (see rules) Multipliers: (see rules) Score Calculation: Total score = total QSO

points x total mults

Submit logs by: 4 December 2011 E-mail logs to: <a href="mailto:contest@sarl.org.za">contest@sarl.org.za</a>

Mail logs to: West Rand Amateur Radio Club, PO Box 5344, Weltevredenpark 1725, South

Africa
Find rules at:

http://www.sarl.org.za/public/contests/SARL

2011\_Contest%20Manual\_issue\_9.pdf

## Next Week's Contests

QRP Fox Hunt, 02:00 - 03:30 UTC 30 November

QRP ARCI Topband Sprint, 00:00 - 06:00 UTC 1 December

NCCC Sprint, 02:30 - 03:00 UTC 2 December

ARRL 160-Metre Contest, 22:00 UTC 2 December to 16:00 UTC 4 December

TARA RTTY Melee, 00:00 - 24:00 UTC 3 December

Wake-Up! QRP Sprint, 06:00 - 06:29 UTC 3 December; 06:30 - 06:59 UTC 3 December, 07:00 -

07:29 UTC 3 December, 07:30 - 08:00 UTC 3 December

TOPS Activity Contest, 16:00 UTC 3 December to 15:59 UTC 4 December

AWA Bruce Kelley Memorial CW Contest, 23:00 UTC 3 December to 23:00 UTC 4 December and

23:00 UTC 10 December to 23:00 UTC 11 December

10-Meter RTTY Contest, 00:00 - 24:00 UTC 4 December

ARS Spartan Sprint, 02:00 - 04:00 UTC 6 December

# History This Week

A look back at events that made history this week - compiled by the Summerland Amateur Radio Club of Lismore, NSW and Dennis, ZS4BS. The week starting Monday 21 November 2011.

- 1497 Vasco da Gama rounds the Cape of Good Hope (22 Nov)
- 1582 William Shakespeare marries Anne Hathaway (27 Nov)
- 1639 First observation of the transit of Venus occurred only two recorded events (24 Nov)
- 1642 Abel Janzoon Tasman discovers Van Diemen's Land Tasmania (24 Nov)
- 1826 John Walker invents the friction match in England (27 Nov)
- 1832 First streetcar railway in America starts operating in New York City at 12 c fare (26 Nov)
- 1859 Charles Darwin publishes "On the Origin of Species" (24 Nov)
- 1863 Patent granted for a process of making colour photographs (23 Nov)
- 1867 Alfred Nobel invents dynamite (25 Nov)
- 1868 Louis Ducos du Hauron patents the trichrome colour photo process (23 Nov)
- 1874 Joseph F Glidden patents barbed wire (24 Nov)
- 1877 Tom Edison announces his "talking machine" invention the phonograph (21 Nov)
- 1884 John B Meyenberg of St Louis patents evaporated milk (25 Nov)
- 1885 Earliest photograph of a meteor shower made (26 Nov)
- 1895 Alfred Nobel established the Nobel Prize (27 Nov)
- 1897 JL Love patents the pencil sharpener (23 Nov)











1899 - Battle at Willow Grange, Natal - Boer War (22 Nov); Battle at Graspan, Cape Colony - Gen Methuen beats the Boers (25 Nov)

1906 - International Radio Telecommunications Com adopts "SOS" as new call for help (22 Nov)

Birthdays for the week

Tarzan, of the Apes, according to Edgar Rice Burroughs' novel, 22 Nov 1888 Charles de Gaulle, 22 Nov 1890 Dale Carnegie, 24 Nov 1888

Scott Joplin, 24 Nov 1868 Bram Stoker, author of Dracula, 24 Nov 1847

Joe DiMaggio, 25 Nov 1914 Tina Turner, 26 Nov 1939

Charles Schultz, 26 Nov 1922 (Peanuts comic strip)

Jimi Hendrix, 27 Nov 1942 Bruce Lee, 27 Nov 1940

## DX Code of Conduct

I will listen, and listen, and then listen again before calling.

I will only call if I can copy the DX station properly.

I will not trust the DX cluster and will be sure of the DX station's call sign before calling.

I will not interfere with the DX station or anyone calling and will never tune up on the DX frequency or in the QSX slot.

I will wait for the DX station to end a contact before I call.

I will always send my full call sign.

I will call and then listen for a reasonable interval. I will not call continuously.

I will not transmit when the DX operator calls another call sign, not mine.

I will not transmit when the DX operator queries a call sign not like mine.

I will not transmit when the DX station requests geographic areas other than mine.

When the DX operator calls me, I will not repeat my call sign unless I think he has copied it incorrectly.

I will be thankful if and when I do make a contact.

I will respect my fellow radio amateurs and conduct myself so as to earn their respect.

## http://www.dx-code.org/publications.htm

Items used with acknowledgement to The ARRL Letter, Amateur Radio Newsline, OPDX Bulletin, 425 DX Bulletin, DXNL Bulletin, ARRL DX News, WIA-News, the RSGB News, Southgate ARC and Pete's DX Newsdesk.

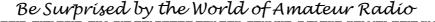
Newsletter editors are most welcome to use material from HF Happenings, just remember to acknowledge the source (which could be any one of the names mentioned above). HF Happenings can be provided in MS Word format.

#### SARL News

Time (UTC / CAT) Freq (kHz) Target Area Language 06:15 / 08:15 \* 7 066 /7 098 From Pretoria / Southern Africa Afrikaans 06:30 / 08:30 \* 7 066 / 7 098 Port Elizabeth Southern Africa English Various 2 metre and 70 cm repeaters and Echolink country wide

#### Amateur Radio Today

Time (UTC / CAT) Freq (kHz) Target Area Language 08:00 - 09:00 / 7 082 From Durban Southern Africa English











10:00 - 11:00 \*

Various 2 metre and 70 cm repeaters and Echolink country wide

## Amateur Radio Today shortwave broadcast information.

Time (UTC / CAT)	Freq (kHz)	Tx kW	Target Area	Language
08:00 - 09:00 /	7 205	100	Southern Africa	English
10:00 - 11:00 *	17 760	250	East Africa	English
16:30 - 17:30 /	3 230	100	Southern Africa	English
18.30 - 19.30 **				

<sup>\*</sup> Sunday \*\* Monday

#### Amateur Radio in Aksie

Dorp	Frekwensie	Tyd en dekking
Bloemfontein	145,600 MHz	Maandagaande 20:30 vanaf die Naval Hill herhaler
Kaap	145,700 MHz	Maandagaande 20:30 in die Boland
Pretoria	145,750 MHz	Woensdagaand net na die ZS6MRK bulletin
Pretoria HF	3 680 kHz	Woensdagaand net na die ZS6MRK bulletin
Rustenburg	145,500 MHz	Maandagaande 20:30
Sasolburg	145,600 MHz	Maandagaande 20:00 dekking in die hele Vaaldriehoek